

Decision 00-08-020 August 3, 2000

**BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA**

Investigation for the purpose of establishing a list for the fiscal years 2000-2001 and 2001-2002 of existing and proposed crossings at grade of city streets, county roads, or state highways in need of separation, or projects effecting the elimination of grade crossings by removal or relocation of streets or railroad tracks, or existing separations in need of alterations or reconstruction in accordance with Section 2452 of the Streets and Highways Code.

Investigation 99-07-001  
(Filed July 8, 1999)

(See Appendix A for Appearances.)

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**OPINION ESTABLISHING PRIORITY LIST  
FOR YEARS 2000-2001 AND 2001-2002**

**Summary**

In this proceeding, we resolve three major issues:

1. We establish the Priority List for the grant of state funds to construct, reconstruct or remove grade separations in Year 2000-2001 in accordance with the current formula.
2. We establish a process by which the Priority List is amended for the Year 2001-2002 in accordance with the current formula.
3. Finally, we also establish a procedure to afford parties an opportunity to raise issues regarding the revisions of the formula by which the Priority List is established. Namely, we order that the Commission Rail Safety and Carriers Division (Staff) shall conduct workshops in an attempt to achieve a consensus on proposed revisions to the formula by which we rank projects. Staff shall report on the status of workshops in the proceeding to establish the Priority List for Year 2002-2003.

We also rescind previously issued Decision (D.) 00-06-078.

**Procedural Matters**

The order instituting investigation (OII) in this proceeding instructed applicants to submit nominations for the Priority List on or before October 15, 1999. In response, the Commission received 68 nominations.

Prehearing conferences (PHCs) were held in Los Angeles and San Francisco on September 20 and 21, 1999, respectively.

On October 20, 1999, the assigned Commissioner issued a Scoping Memo and Ruling affirming the preliminary “quasi-legislative” category of this proceeding, naming the assigned Administrative Law Judge (ALJ) as the presiding officer in any evidentiary hearing on adjudicative facts, outlining two issues and setting the schedule. The two issues designated for resolution were:

(1) Whether the formulas used to establish the Priority List should be revised; and (2) In what order should the nominated projects be ranked on the Priority List.

On January 3, 2000, the assigned Commissioner amended the Scoping Memo to delay resolution of the first issue—formula revision-- until the Grade Separation Program proceeding in 2001-2002. We affirm the assigned Commissioner's determination.

Evidentiary hearings on adjudicative facts were held in Los Angeles and San Francisco on February 22-23 and 28-29, 2000, respectively, where Staff, interested parties, and nominees appeared.

On June 22, 2000 D.00-06-078 was issued in the proceeding resolving the same issues as addressed herein and in the same manner. An Executive Director's Order correcting a "clerical error" was issued the same day which removed one paragraph of text. Subsequently it was determined that some confusion existed regarding the text the Commission voted on and the appropriateness of the Executive Director's order. On July 20, 2000 the commission voted to rescind the Executive Director's Order (D.00-07-054) and decided to place the original order back on the agenda. D.00-06-078 is hereby rescinded and its decision number cancelled.

## **Background**

Section 2450 *et seq.* of the California Streets and Highways (S&H) Code establishes the Grade Separation Program to fund projects throughout the state that will eliminate hazardous grade crossings. Each year, the California Transportation Commission (CTC) distributes a total of \$15 million to eligible projects (S&H Code § 190) in the priority established by this Commission. Therefore, prior to July 1, the Commission establishes a Priority List of eligible

separation projects throughout the state most urgently in need of construction pursuant to S&H Code § 2452.

In Decision (D.) 98-06-074 (I.97-07-014), the Commission indicated that the total fund of \$15 million was woefully inadequate to fund projects totaling \$600 million that were direly needed to protect the public. As of the date of this decision this fund has not been increased.

The Commission Priority List may contain projects for the construction of new grade crossings, alteration of existing separations, or projects that eliminate crossings by removing or relocating streets or railroad tracks. For a project that eliminates an existing crossing or alters or reconstructs an existing grade separation, an allocation of 80% of the estimated cost of the project is made, with the local agency and railroad each contributing 10%. For a project that plans a grade separation of a proposed new crossing (where currently there is no existing crossing), an allocation of 50% of the estimated project costs is made, with the remaining 50% contributed by the local agency.

***Total Funds Available***

The California Department of Transportation (Caltrans) annually receives \$15 million for allocation to projects on the Priority List. However, funds allocated by Caltrans may be held in abeyance for years due to delayed projects, causing other eligible projects to remain without adequate funding. All projects on the Priority List are categorized as being urgently in need of construction. Many of them are ready to commence construction as soon as Caltrans makes an allocation. Since funds for grade separation projects are scarce, this year Caltrans

has established a new policy regarding project delays. Caltrans is reviewing uncompleted projects allocated funds in the prior years to ascertain whether they are ready to commence construction. Allocations to projects in a prior year that are delayed indefinitely will revert to the fund to be distributed to other eligible, timely projects.

Caltrans has identified two delayed projects in the City of Fresno where approximately \$9.5 million will revert to the fund and be reallocated. This amount, added to the annual \$15 million grant, totals approximately \$24.5 million to be allocated in fiscal year 1999-2000. At the hearing, Caltrans estimated that four new projects will be funded in fiscal year 1999-2000. On June 7, 2000, Caltrans notified the Commission that the following four projects, with their current ranking on the Priority List in this proceeding, had been funded from 1999 funds: City of Monclair, Ramona Avenue (#11); Kern County, Seventh Standard Road (#14); City of San Buenaventura, Auto Center Drive/Johnson Drive (#44); and Fresno County, Chestnut Avenue (#46). Accordingly, staff removed these projects from the Priority List in this proceeding. Caltrans anticipates a total of \$15 million in state funding will be allocated in this proceeding (July 1, 2000-June 30, 2001).

***Maximum Allocation Per Project***

In compliance with S&H Code § 2454(g), the total allocation for a single project shall not exceed \$5 million without specific legislative authorization, except that the amount for a single project allocation may be increased to either: the amount that includes the federal construction cost index increase since 1976; or, an amount that does not exceed one-third of the total funds appropriated for grade separation projects. The Commission Staff uses the Price Trends for Federal-Aid Highway Construction as the federal construction cost index. For

1999, the second quarter composite index is 143.4. The 1976 composite index is 56.3. Based on these numbers, the allocation can be increased to \$12.7 million ( $[143.4/56.3] * \$5 \text{ million}$ ), if this allocation does not exceed one-third of the funds available. Since 1974, the fund has remained at \$15 million. One-third of this fund is \$5 million. Therefore, the controlling limit is based on available funds. For the purpose of this investigation, the maximum allocation for a single project is \$5 million.

### ***Formulas To Evaluate Projects***

In 1990, the Commission established the two formulas by which it will evaluate and rank projects for the Priority List. (D.90-06-058). Appendix B contains the formulas which are used to evaluate projects in this proceeding.

### **Multiple Crossing Project Evaluation**

Staff evaluates projects involving the closure and/or separation of multiple crossings in the same manner as single crossing projects. However, Staff reviews the commonalties among the crossings and proximity to each other. Any portion of a multiple project that is clearly separable is treated as a separate nomination. Point allocation for multiple crossing projects are determined by adding the vehicle or train volumes, the crossing geometrics, accident history, and/or blocking delays of each crossing.

### **Disqualification, Exclusion, and Withdrawal of Projects**

In its Staff report and during the hearing, Staff requested that the following projects be excluded because they are entirely light rail: the three projects of the County of Santa Clara, and the Bradshaw Road project of the Sacramento Regional Transit District. Staff requested to exclude the following nominations because the nominees failed to appear at the hearing, a requirement of this proceeding pursuant to the OII: California City, Sonoma, Rancho

Cucumonga and two projects of San Bernardino County. In addition, Staff requested to exclude the Anaheim Street project of the Port of Long Beach, which was already under construction (S&H Code § 2460.7). In a ruling on March 22, 2000, the presiding officer granted Staff's requests to exclude these projects from the Priority List.

### **Disputed Scoring Of Projects**

During the hearing, several nominees disputed Staff's assignment of points for various categories in scoring the projects. Staff assigned points to projects for the categories and criteria, which are input into one of two formulas above in order to derive a total score for the project. The presiding officer preliminarily resolved the adjudicative facts as described below. We affirm the presiding officer's rulings.

#### ***City of Redding***

At the hearing in San Francisco, the City of Redding challenged Staff's rating for the hazard factor of its South Street project. Vehicles approaching this crossing are forced to wait on the railroad tracks in order to make a left turn because the traffic in this location backs up to the corner. Therefore, Robert M. Barton, witness for the City of Redding, believes a greater rating should be given due to this extreme hazard. Staff did not allocate any points in the "Other Factor (OF)" category for this hazard.

The presiding officer ruled that this condition of traffic back-up which leaves cars waiting or stranded on railroad tracks creates the likelihood of a serious and unavoidable accident in the event of a train passing through these crossings. At the hearing, several witnesses testified about this same traffic back-up problem that currently exists at other proposed project sites. Therefore, the presiding officer ordered revisions to the City of Redding and other similar



projects commensurate with the hazard this back-up condition creates. Staff revised its evaluation of this and similar projects by adding one point to the OF. (Appendix C, Attachment 1, pp. 1-3.)

### ***Kern County Standard Road Project***

At the hearing in San Francisco, Barton challenged Staff's rating of the crossing geometrics of Kern County's Standard Road project. Barton believes the 135% angle turn which causes trucks to hit the railroad crossing arm 2-3 times a week when making the turn warrants a greater rating. Staff rated this factor as 8.72 based upon the description of the project.

Based upon comparable ratings in other projects with hazardous conditions, the presiding officer concurred with Staff's rating.

### ***City of Torrance***

At the hearing in Los Angeles, Staff opposed the blocking delay (BD) and cost estimate factors in the proposed Del Amo Boulevard project submitted by the City of Torrance (the City). The presiding officer's ruling is discussed below.

#### **1. Blocking Delay**

BD is the average wait and traffic delay created by a train passing through a railroad crossing. D.90-06-058 mandates that BD be measured at a crossing based upon reliable data supplied for similar grade crossings in close proximity to the one proposed. The City contends there is no comparable crossing near the proposed site and the proposed site has no existing crossing, therefore, it used the traffic delays at the proposed site of the train traffic in an adjacent switching yard. However, Staff points out that these trains in the switching yard create delays that exceed 10 minutes, a violation of G.O. 135, which will not be allowed at the regulated crossing once it is completed. At the hearing, Staff recommended that we exclude delays over 10 minutes used to

compute the average delay. Alternatively, Staff recommended that the City perform a traffic delay study at a comparable site or that five minutes be used instead of the original nine-minute average blocking delay submitted in the nomination. The City contends there is no comparable site and will not agree to perform a study.

The presiding officer concluded that a five-minute average BD was appropriate.

## **2. Cost of Project**

Staff contends that the qualifications for an eligible project contained in S&H Code § 2450(b) require that the project cost must include all approaches, ramps, connections, drainage and other construction required to make the grade separation operable and to effect the separation of grades.<sup>1</sup> The City contends the cost to acquire the right-of-way and construct a new roadway are not a necessary part of this proposed grade separation project. However,

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<sup>1</sup> § 2450(b) “Project” means the grade separation and all approaches, ramps, connections, drainage, and other construction required to make the grade separation operable and to effect the separation of grades. Such grade separation project may include provision for separation of nonmotorized traffic from the vehicular roadway and the railroad tracks. If a separation of nonmotorized traffic is not to be included in a project, there shall be an affirmative finding that the separation of nonmotorized traffic is not in the public interest. On any project where there is only one railroad track in existence, the project shall be built so as to provide for expansion to two tracks when the Director of Transportation determines that the project is on an existing or potential major railroad passenger corridor. Such project may consist of:

- (1) The alteration or reconstruction of existing grade separations.
- (2) The construction of new grade separations to eliminate existing or proposed grade crossings.
- (3) The removal or relocation of highways or railroad tracks to eliminate existing grade crossings.

Staff points out that these costs were included in applications for funding in two prior years. Moreover, Staff contends that this proposed grade separation will not be operable without the additional road construction.

The map of this project indicates that this grade separation will be built on currently vacant land between the ends of two city streets. In order to enter and exit the grade separation, the road must be extended to meet both ends of the grade separation. Therefore, the presiding officer concluded that the project is not operable without this additional road construction and this cost must be included in the total project cost.

### **Priority List Adopted**

No party disputed the Priority List revised in accordance with the presiding officer's ruling. After receipt of Caltrans notification that four additional projects on this list were funded from existing funds, the list was revised to delete these projects. Therefore, we adopt Staff's revised Priority List, Exhibit 73, attached as Appendix C.

### **New Procedure To Establish Priority List**

Unlike past years, this proceeding has been changed from a two-year to a one-year process due to statutory time limitations that were enacted in Senate Bill (SB) 960, effective January 1, 1998. Under SB 960, quasi-legislative proceedings, such as this, must be completed in 18 months. However, this statutory time period does not allow adequate time in the second year to issue a second formal Commission decision. Therefore, we notified all known interested parties in the OII in this proceeding of the need for a new one year procedure to

establish a Priority List.<sup>2</sup> Prior to this proceeding, in D.99-06-035, we outlined several procedural options: to open a new docket to establish the Priority List for each year of the two-year period, or to certify the Priority List for both years in one decision the first year. After two years experience in operating under SB 960, we deem the latter option as the less burdensome for parties and the Commission. We will adopt a Priority List for a two year period and authorize Staff to revise the Priority list after the first year based upon input from Caltrans.

### **Formula Revision**

At the PHC, Robert M. Barton of DeLeuw, Cather and Company representing the City of Bakersfield and Kern County, proposed revisions to the existing formula by which projects are prioritized. As requested, he submitted in writing his proposed revisions to the formulas. Five parties, including the Commission Rail Safety & Carriers Division (Staff), filed timely comments.

Barton recommends that accident history and blocking delay be added as part of the “Special Conditions Factor” instead of a multiplier in the current formulas and that a “Readiness Factor” be added. Four parties<sup>3</sup> agree that the existing formulas need revision, yet each party offers a variance of Barton’s proposal. All four parties request that a workshop be held to discuss the

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<sup>2</sup> Including all cities, counties, railroads, the League of California Cities, the County Board of Supervisors Association, CTC, California Department of Transportation, Light Rail Transit Agencies and known interested parties.

<sup>3</sup> H. Richard Neill of Moffatt & Nichol Engineers, Edward Ohannesian representing Fresno County Public Works Department, O. Gary Plunkett, P.E., Director of Tehama County Public Works and Rick Raives, P.E., City Engineer for the City of San Buenaventura.

appropriate formula revisions. Edward Ohannesian, Senior Engineer for the Fresno County Public Works Department, offers to host the workshop.

A fifth party, John Clifton, while testifying during the hearing regarding the Wine Train Project, recommended that projects be ranked on the Priority List by need, safety, and hazard and that the Commission become more involved in the communities of proposed projects.

Staff, on the other hand, believes Barton's proposal was considered at length in Investigation 89-09-021 when the Commission adopted the present priority formulas in D.90-06-058. Staff recommends that the Commission review these proposals after July 1, 2000 given the short time framework to complete the priority list.

Barton's proposal and the parties' comments on his proposal require review and analysis of the historical basis of the existing priority formulas as well as evaluation of the effectiveness of the existing formulas since they were established in 1990. The schedule outlined in the scoping memo would not accommodate the time Staff obviously needs to assess the existing formulas, research Barton's proposal, hold workshops, and take any other necessary steps to attempt to reach a resolution on any revisions.

In addition, a wider group of potential parties interested in this proceeding had no notice of the proposed new formulas and existing parties had no notice prior to submitting nominations for the two-year list process to be established in this proceeding. It would be unfair to establish a Priority List for two years, as we had planned, and change the formulas for the established list in the second year. Therefore, this issue was removed from this to the next such proceeding. We herein instruct Staff to provide notice to all cities, counties and interested parties and conduct a workshop on the proposed revisions to the priority

formulas, submit a workshop report and make its recommendations to the Commission prior to the OII in the next Grade Separation Program proceeding.

### **Comments on Proposed Decision**

The proposed decision of Commissioner Wood and ALJ Bennett in this matter was mailed to the parties in accordance with Section 311(d) of the Public Utilities Code and Rule 77.1 of the Rules of Practice and Procedure. No comments were filed. However, the proposed decision was revised to include updated funding information from Caltrans. Accordingly, Appendix C, the Revised Priority List, was corrected to exclude the four funded projects.

### **Findings of Fact**

1. Each year the Commission is required pursuant to S&H Code § 2452 to establish a Priority List for the Grade Separation Program to fund projects throughout the state that will eliminate hazardous grade crossings.
2. On July 8, 1999, in its order instituting the investigation in this proceeding, the Commission provided written notice to all cities, counties, railroads, the League of California Cities, the County Board of Supervisors Association, CTC, Caltrans, Light Rail Transit Agencies and known interested parties that the procedure of issuing a Commission decision each year for two years would change due to newly effective time limits in SB 960. No party commented on this revision.
3. Notice of this proceeding was also published in the Commission's Daily Calendar on July 9, 1999.
4. PHCs were held in Los Angeles and San Francisco on September 20 and 21, 1999, respectively.
5. The procedure of certifying in one decision a Priority List for the first fiscal year of the two-year period, and authorizing Staff to revise the list for the second

year of this period is the most efficient and less burdensome procedure under SB 960 for this two-year Priority List process.

6. EHs on adjudicative facts were held in Los Angeles and San Francisco on February 22-23 and February 28-29, 2000, respectively, where the Commission Rail Safety and Carriers Division Staff, interested parties, and nominees appeared.

7. At the evidentiary hearing, the presiding officer preliminarily resolved all adjudicative facts disputed by the parties. The preliminary resolution of those facts is reasonable.

8. During the fiscal year 2000-2001, Caltrans will notify Staff of projects to be deleted from the Priority List for Year 1 herein established. After these projects are removed, the remaining projects in the same priority form the Priority List for Year 2.

9. No party opposed establishing the Priority List attached as Appendix C, which is revised pursuant to the presiding officer's ruling on disputed adjudicative facts.

10. Parties commenting on Robert M. Barton's proposed formula revisions were unable to agree that revisions were necessary or what these revisions should be.

11. The commenting parties requested that a workshop be held to discuss the proposed revisions to the formulas and attempt to either agree or narrow the disputed issues.

12. Due to time constraints in this proceeding and Staff's request that studies on the impact of the existing formulas be conducted, the assigned Commissioner deferred resolution of the proposed formula revisions until after a workshop is held.

13. D.00-06-078 was issued in the proceeding on June 22, 2000 and resolved on the substantive issues presented in the same manner as the present decision.

14. An Executive Director Order was issued on the same day to correct a clerical error, removing one paragraph of text.

15. It was subsequently determined that confusion may have existed as to what text the Commission had voted on.

16. On July 20, 2000 the Executive Director's Order was rescinded and the Commission requested the order of June 22, 2000 be brought before the Commission again for a new vote.

17. Parties may have relied upon the effective date of D.00-06-078.

### **Conclusions of Law**

1. The assigned Commissioner's determination to defer resolution of revisions to the formulas used to prioritize projects in this proceeding should be affirmed.

2. The presiding officer's resolution of disputed adjudicative facts should be affirmed.

3. The revised Priority List, attached as Appendix C, should be established as the list of projects most urgently needed to receive Grade Separation Program funds for the fiscal year July 1, 2000 to June 30, 2001 (Year 1).

4. The Staff should be ordered to revise the Priority List for Year 1 established in this proceeding based upon revisions submitted by Caltrans during the fiscal year July 1, 2001 to June 30, 2002 to establish the Priority List for Year 2.

5. The ranking criteria established in past Grade Separation Program proceedings for consideration of projects with the same priority index number, and projects of otherwise equal priority where the city or county contributes 50% of the cost should be applied to the Priority List for Year 2.



6. The Staff should be ordered to convene a workshop after 60 days notice to all cities, counties, and known interested parties to discuss the proposals presented in this proceeding to revise the formulas by which the Commission ranks projects for the Priority List in proceedings such as this. Staff should be ordered to provide a written report on the outcome of the workshop in time to include this report in the order instituting the next Grade Separation Program proceeding for 2002-2003.

7. The order in this proceeding should be effective on the date signed so that our statutory deadline of issuing an order by July 1, 2000 may be met.

8. D.00-06-078 should be rescinded.

9. Activities undertaken by parties in reliance on the effective date of D.00-06-78 should be given full effect as though D.00-06-078 remained in effect since this present decision supercedes it without any changes in its major issue determinations.

10. This proceeding should be closed.

## **O R D E R**

### **IT IS ORDERED** that:

1. The assigned Commissioner's determinations and the presiding officer's rulings during this proceeding are affirmed.

2. The Priority List, attached as Appendix C, is established as the list of projects most urgently in need of construction for the fiscal year July 1, 2000 to June 30, 2001 (Year 1).

3. Prior to July 1, 2001, the Rail Safety and Carriers Division (Staff) will revise the Priority List established in this proceeding as directed by the California

Department of Transportation (Caltrans) to establish the Priority List for the fiscal year July 1, 2001 to June 30, 2002 (Year 2).

4. For projects on the Priority List for Year 2, with regard to any projects having the same priority index number, Staff will first consider projects which separate or eliminate existing grade crossings, then projects which alter or reconstruct existing grade separations, and finally projects to construct new grade separations. Within each of these categories, Staff will first consider the lowest cost project so that the maximum number of projects may be accomplished with available funds.

5. For projects on the Priority List for Year 2, Staff will give greater priority to grade separation projects of otherwise equal priority for which the amount contributed by a city or county is equal to or greater than 50% of the cost of the project.

6. Prior to the institution of the next Grade Separation Program proceeding for the Year 2002-2003, the Staff will convene a workshop after a minimum of 60 days notice to discuss the proposals presented in this proceeding to revise the formulas by which the Commission ranks projects for the Priority List. Staff will serve notice of this workshop on all parties in this proceeding, all cities, counties, and railroads, the League of California Cities, the County Board of Supervisors Association, the California Transportation Commission, the California Department of Transportation, all Light Rail Transit Agencies and all known interested parties. Staff will provide a written report on the outcome of the workshop in time to include this report in the order instituting the Grade Separation Program proceeding for Year 2002-2003.

7. The Executive Director shall furnish a certified copy of this decision to Caltrans and the California Transportation Commission prior to July 1, 2000.

8. Decision (D.) 00-06-078 is rescinded and its decision number cancelled.

9. Since this order supercedes and replaced D.00-06-078, is identical to D.00-06-078 in all significant determinations, and since parties may have relied upon the effective date of D.00-06-078, the present order is effective today but all activities occurring between June 22, 2000 and the date of issuance of this present offer shall be deemed in compliance with this order if they would have been in compliance with D.00-06-078.

10. This proceeding is closed.

This order is effective today.

Dated August 3, 2000, at San Francisco, California.

LORETTA M. LYNCH

President

HENRY M. DUQUE

JOSIAH L. NEEPER

RICHARD A. BILAS

CARL W. WOOD

Commissioners

**APPENDIX A  
(APPEARANCES)**

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APPENDIX B  
(Page 1)

**FORMULA FOR CROSSING NOMINATED FOR  
SEPARATION OR ELIMINATION**

$$P = \frac{V (T + 0.1 \times LRT) (AH + BD)}{C \times F} + SCF$$

Where:

- P** - Priority Index Number
- V** - Average 24-Hour Vehicular Volume (1 point per vehicle)
- C** - Total Separation Project Costs (1 point per thousand dollars)
- T** - Average 24-Hour Train Volume (1 point per train)
- LRT** - Average 24-Hour Light Rail Train Volume (1 point per train)
- F** - Cost Inflation Factor based on the Current Construction Cost Index (8.32)
- AH** - Accident History (up to 3 points per accident)
- BD** - Crossing Blocking Delay (up to 10 points)
- SCF** - Special Conditions Factor = VS+RS+CG+PT+OF
- VS** - Vehicular Speed Limit (up to 5 points)
- RS** - Railroad Prevailing Maximum Speed (up to 7 points)
- CG** - Crossing Geometrics (up to 17 points)
- AR** - Alternate Route Availability (up to 5 points)
- PT** - Passenger Trains (up to 10 points)
- OF** - Other Factors: secondary accidents, emergency vehicle usage, passenger buses, school buses, trains carrying hazardous materials trains and trucks, and community impact (up to 18 points)

## APPENDIX B

### (Page 2)

**F = Cost Inflation Factor** - the inflation factor "F" is determined by comparing the 1976 inflation factor with the changes in the construction cost index (CCI) from 1976 to the current investigation year (1999) found in the ENR (Engineering News Record) journal. The calculation is as follows:

$$F = \frac{\text{CCI ('75-'76)} \times \text{'75-'76 "f"}}{\text{CCI (Current Year)}}$$

Where,           the CCI for 1975-76 is 2100,  
                       "f" – cost inflation factor for 1975-76 is 24, and  
                       the average CCI for 1999 is 6060,\*  
 therefore;       the new F for this OII is  $(2100 \times 24) / 6060 = 8.32$

\*The average CCI for 1999 is the sum from January to December (72714) / 12 = 6060 per the following ENR data:

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CCI	6000	5992	5986	6008	6006	6039	6076	6091	6128	6134	6127	6127

**AH = Accident History** (last 10 years from application filing due date)

The Commission's FORM A is the record for reportable accidents for each crossing under jurisdiction. The AH points will be based on accidents that involve trains at the crossing. For each accident Staff assigns points based on the following:

Points =  $(1 + 2 \times \text{No. Killed} + \text{No. Injured}) \times \text{CPF}$

CPF = The Crossing Protection Factor is based on warning devices at crossing.

STANDARD	9	8	3	1
CPF	1.0	0.4	0.2	0.1

Note 1: No more than three points shall be allowed for each accident prior to modification by the protection factor.

Note 2: Each accident is rated separately and modified by a factor based on the warning devices in existence at time of the accident.

## APPENDIX B

### (Page 3)

**BD = Blocking Delay Per Train** (The time in which vehicular traffic is delayed to allow a train to pass at a crossing.) The blocking delay, for a typical day, is the elapse time in minutes when trains pass the crossing. The delay is measured from the point that the warning devices are activated at the crossing and the time after the train has cleared the crossing and the warning devices are reset. The average BD points are the total delay time divided by the total number of trains observed (10 points max).

### **VS = Vehicular Speed Limit - Posted Speed Limit**

SPEED (mph)	0-30	31-35	36-40	41-45	46-50	51+
POINTS	0	1	2	3	4	5

### **RS = Railroad Maximum Speed**

SPEED-MPH	0-25	26-35	36-45	46-55	56-65	66-75	76-85	86+
POINTS	0	1	2	3	4	5	6	7

**CG = Crossing Geometrics** - 0 - 17 points are assigned to each crossing based on the relative severity of physical conditions, i.e. grade, alignment, site distance, track skew angle, traffic signals, entrances and exits, etc.

**AR = Alternate Route Availability** - The AR is the nearest crossing available that vehicles may cross if the highway-rail grade crossing is blocked by train(s). The alternate route distance is the roadway distance between the blocked crossing and the available crossing measured in feet. The AR points are determined by dividing the distance (in feet) by 1000. A maximum of 5 points is assigned to AR distances greater than 5000 ft.

**PT = Passenger Trains** – Additional points are given to projects that have passenger trains travelling through the crossing based on the following:

NO. OF TRAINS	1-2	3-5	6-10	11-20	21-30	31-40	41-50	51-60	61-70	70+
POINTS	1	2	3	4	5	6	7	8	9	10



## APPENDIX B

### (Page 4)

**OF = Other Factors-** Other Factors are valued in a range from 0 to 18 points based on:

CATEGORY	POINTS
SECONDARY ACCIDENTS	0-3
EMERGENCY/ OTHER VEHICLE USAGE	0-3
PASSENGER BUSES	0-3
HAZ-MAT TRAINS & TRUCKS*	0-3
COMMUNITY IMPACT	0-3
SCHOOL BUSES	0-3

\* Hazardous Material Trains & Trucks must display the placard with a clearly visible diamond-shaped sign to be counted for this category.

### FORMULA FOR EXISTING SEPARATIONS NOMINATED FOR ALTERATION OR RECONSTRUCTION

$$P = \frac{V (T + 0.1 \times LRT)}{C \times F} + SF$$

Where:

- P** - Priority Index Number
- V** - Average 24-Hour Vehicular Volume (1 point per vehicle)
- T** - Average 24-Hour Train Volume (1 point per train)
- LRT** - Average 24-Hour Light Rail Train Volume (1 point per train)
- C** - Total Separation Project Costs (1 point per thousand dollars)
- F** - Cost Inflation Factor (8.32)
- SF** - Separation Factor = WC + HC + SR + AS + POF + AP + DE
- WC** - Width Clearance (up to 10 points)
- HC** - Height Clearance (up to 10 points)
- SR** - Speed Reduction (up to 5 points)
- AS** - Accidents at or near structure (0.1 pt per accident)
- POF** - Probability of Failure (up to 10 points)
- AP** - Accident Potential (up to 10 points)
- DE** - Delay Effects (up to 10 points)

**APPENDIX B****(Page 5)**

**F = Cost Inflation Factor** - the inflation factor "F" is determined by comparing the 1976 inflation factor with the changes in the construction cost index (CCI) from 1976 to the current investigation year (1999) found in the ENR (Engineering News Record) journal. The calculation is as follows:

$$F = \frac{\text{CCI ('75-'76)} \times \text{'75-'76 "f"}}{\text{CCI (Current Year)}}$$

Where, the CCI for 1975-76 is 2100,  
 "f" – cost inflation factor for 1975-76 is 24 and  
 the average CCI for 1999 is 6060,  
 therefore; **the new F for this OII is (2100 x 24) / 6060 = 8.32**

The average CCI for 1999 is the sum from January to December (72714) / 12 = 6060, per the following ENR Data:

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CCI	6000	5992	5986	6008	6006	6039	6076	6091	6128	6134	6127	6127

**SF** = Separation Factor = WC+HC+SR+AS+PF+AP+ DE

**WC** = Width Clearance is determined by bridge width (in feet) and the number of traffic lanes in existence (N):

If the Width is:	POINTS
16'+12(N)	0
12' but less than 16' + 12(N)	2
8' but less than 12' + 12(N)	4
Less than 8'+12(N)	6
11(N)	8
Less than 11(N)	10

**APPENDIX B**

(Page 6)

**HC** = Separation Height Clearance is determined by the height clearance from center of traffic lane and bridge (Underpass) or from top of rail and bridge (Overpass).

**Underpass**

Height (feet)	Points
15' and above	0
14' but less than 15'	4
13' but less than 14'	8
Less than 13'	10

**Overpass**

Height (feet)	Points
22.5' and above	0
20' but less than 22.5'	4
18' but less than 20'	8
Less than 18'	10

**SR** = Speed Reduction or Slow Order

	Points
None	0
Moderate	2
Severe	5

**AS** = Accidents at or Near Structure during the last 10 years from the application due date (October 1, 1989 to October 1, 1999). The AS points are determined by dividing the total number of occurrences by 10 and rounded off to the nearest tenth of a point (86 occurrences =  $86/10 = 8.6$  points).

**PF** = Probability of Failure has a 10 point maximum taking structure age into account.

	Points
Minimal/None	0
Slight	2-3
Moderate	4-6
Extreme	7-10

**APPENDIX B**  
**(Page 7)**

**AP** = Accident Potential – A maximum of 10 points is given for the geometrics at the separation like: road curvature, signage, and illumination.

	Points
None	0
Slight	2-3
Moderate	4-6
Extreme	7-10

**DE** = Delay Effects – A maximum of 10 points is given to conditions that cause traffic delays at the separation like road bottlenecks, slow vehicle usage (trucks, agriculture equipment, lack of left or right turn lanes or other traffic congestion.

	Points
None	0
Slight	2-3
Moderate	4-6
Extreme	7-10

**(END OF APPENDIX B)**

**APPENDIX C – EXHIBIT 73**

**PUBLIC UTILITIES COMMISSION**

320 WEST 4<sup>TH</sup> STREET, SUITE 500  
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June 7, 2000

Re: I.99-07-001 - Grade Separation Priority List for FY 2000-01 and FY 2001-02  
Late-filed Exhibit 73

To: All Parties of Record

The Department of Transportation (Caltrans) notified the Commission staff that the following four projects are receiving allocated funds this fiscal year 1999-2000:

<b>PUC ID</b>	<b>Agency</b>	<b>Crossing Location</b>
B-516.9	City of Montclair	Ramona Avenue
E-404.24B	City of Ventura	Auto Center Drive (Johnson Dr)
B-210.3	Fresno County	Chestnut Avenue
B-305.9	Kern County	7 <sup>th</sup> Standard Road

Subsequently, the four projects are to be removed from the proposed Separation of Highway-Rail Grade Crossing Priority List for Fiscal Years 2000-2001 and 2001-2002.

Enclosed is the Revised Exhibit 73, incorporating these changes. ATTACHMENT 1, REVISED APPENDIX A, REVISED APPENDIX B, and REVISED APPENDIX C of Revised Exhibit 73 supercede those in Late Filed Exhibit 73.

If you have any questions, you may contact me at (213) 576-7078 or e-mail [rxm@cpuc.ca.gov](mailto:rxm@cpuc.ca.gov).

Sincerely,

Rosa Muñoz  
Transportation Engineer

Enclosure

C: Administrative Law Judge Patricia A. Bennett

**ATTACHMENT 1 - Changes To Application Data for Fiscal Years 2000-2001 & 2001-2002**

(Page 1 of 3)

Exhibit	PUC ID	Agency	Crossing Location	Exhibit 1 Priority Index	Changes	Revised Priority Index
2	101VY-1.17	LOS ANGELES	NORTH MAIN ST	55.62	Change T to 117 Change PT to 72 for 10 pts	56.09
3	101EB-484A 101VY-1.36A	LOS ANGELES (2 Xings)	North Spring St & North Spring St	49.42	Change T to 117	53.47
4	B-485.8	LOS ANGELES	VALLEY BLVD	123.38	Change project to Underpass	123.38
5	1BK-495.4	DOWNEY	BROOKSHIRE AVE	49.84	BD verified, no change O to 303 for 2 pts	51.84
7	PROPOSE D	TORRANCE	DEL AMO BLVD	116.68	Change C to 18,722 Change BD to 5	42.60
8	2B-21.20	CORONA	MCKINLEY ST	37.99	Change V to 33,720 Change C to 17,250 Change BD to 1.6 Change PB to 23 for 1 pt Change SB to 20 for 1 pt Change H to 770 for 3 pts Change O to 3 for 1 pt Change SA to 53 for 3 pts Change CI to 3	53.61
11	OR-182.9	IRVINE	SAND CANYON AVE	93.71	Change SA to 9 for 1 pt No change for Priority Index	93.71
12	3-53.1	RIVERSIDE	JURUPA AVE	75.64	Change V to 16,190 Change C to 13,300 Change VS to 43.6 for 3 pts Change RS to 62.18 for 4 pts Change CG to 21.92 Change SA to 8 for 1 pt Change SB to 25 for 2 pts	100.85
14	B-281.2	DELANO	GARCES HWY	40.06	Change C to 7,095 Change BD to 3.43 Change CI to 3	33.34
15	B-280.2	DELANO	CECIL AVE	80.17	Change C to 7,848 Change BD to 3.43 Change CI to 3	61.93
21	B-517.4	MONTCLAIR	MONTE VISTA AVE	128.18	Change V to 12,514 Change BD to 3.52	133.46
24	B-613.0	COACHELLA	DILLON RD	60.35	Change V to 14,269	68.08
27	B-413.7	PALMDALE	PALMDALE BLVD (SR138)	49.24	Change T to 60 Change PT to 15 for 4 pts Evaluate as single year nomination	71.94
31	36-7.4	CHULA VISTA	E ST	32.74	Change V to 28,643 Change O to 90 for 1 pt Change PB to 0 for 0 pts Change SB to 2 for 1 pt Change H to 1 for 1 pt	40.62
41	VY-69.33	LOS ANGELES CO	SIERRA HWY	64.84	Change T to 60 Change VS to 55 for 5 pts Change RS to 65 for 4 pts Change PT to 15 for 4 pts	153.23

**ATTACHMENT 1 - Changes To Application Data for Fiscal Years 2000-2001 & 2001-2002**

					Change AH to 11	
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(Page 2 of 3)

Exhibit	PUC ID	Agency	Crossing Location	Exhibit 1 Priority Index	Changes	Revised Priority Index
44	VY-66.92	LOS ANGELES CO	AVENUE S	29.52	Change T to 22 Change PT to 15 for 4 pts	31.29
46	2-1114.7 2-1113.5	BNSF/ Alternate for San Joaquin Consolidation	CONSOLIDATION (2 Xings) Mariposa Rd & Kaiser Rd	67.12	Change V to 6,777 Change C to 6,439	72.48
47	2-1112.2 2-1113.5 2-1114.7 2-1108.3	SAN JOAQUIN CO	CONSOLIDATION (4 Xings) Jack Tone Rd Kaiser Rd Mariposa Rd Wagner Rd	270.79	Change V to 10,511 Change C to 10,444 Change AH to 7.5	86.91
48	D-92.8	SAN JOAQUIN CO	WEST LANE	56.73	Change CI to 3	58.73
50	2-885.6 2-885.6 2-885.75 2-885.77 2-885.95 2-886.2 2-886.4	BAKERSFIELD	BEALE-TRUXTON- BAKER (7 Xings) 21 <sup>st</sup> St Gage St Beale Ave Truxtun Ave Baker St Tulare St Sonora St	151.85	Change AR to 3.73	152.95
52	B-308.9	KERN COUNTY	OLIVE DR	54.23	Change AR to 4.9	55.13
55	2-889.5	SHAFTER	7TH STANDARD	46.17	Change O to 24 for 1 pt	47.17
56	C-258.0	REDDING	SOUTH ST	43.11	Change AR to 3 Change CI to 3	47.36
59	E-64.0 E-64.7 E-65.2	SAN JOSE	CONSOLIDATION (3 Xings) Bailey Ave Laguna Ave Richmond Ave	64.10	Change V to 6,298	63.02
63	4-84.8	LATHROP	LATHROP RD	91.59	Change T to 26 Change BD to 3.06 Change PT to 6 for 3 pts	64.34
64	D-82.1	LATHROP	LATHROP RD	92.93	Change T to 20 Change BD to 3.87 Change PT to 0 for 0 pts	54.29
66	BB-0.4B	WEST SACRAMENTO	WEST CAPITAL AVE/Permanent	37.26	Change POF to 9 correction	39.26
67	BB-0.4B	WEST SACRAMENTO	WEST CAPITAL AVE Emergency Repair	51.31	Change DE to 6 correction	54.37
69	4-132.9	SRTD (1)	FLORIN RD	72.54	Change LT to 0	50.98
70	2-1180.41- B	HERCULES	SYCAMORE AVE	32.46	Change T to 35	27.43



**ATTACHMENT 1 – *Changes To Application Data for Fiscal Years 2000-2001 & 2001-2002***  
**(Page 3 of 3)**

<b>PUC ID</b>	<b>Agency</b>	<b>Crossing Location</b>	<b>Exhibit 1 Priority Index</b>	<b>Recommended to Dismiss</b>
BAM-386.9	CALIFORNIA CITY	CALIFORNIA CITY BLVD	21.98	Dismiss non-appearance
SG-41.10	RANCHO CUCAMONGA	HAVEN AVE	34.59	Dismiss non-appearance
2-71.0 BB-480.1	SAN BERNARDINO CO	(2 Xings) Glen Helen Parkway Glen Helen Parkway	35.80	Dismiss non-appearance
2-30.6B	SAN BERNARDINO CO	NATIONAL TRAILS HWY	39.55	Dismiss non-appearance
NWP498- 6555	SONOMA CO	OLD REDWOOD HWY	34.78	Dismiss non-appearance
83E-10.03	SRTD (1)	BRADSHAW RD	63.67	Dismiss – exclusive light-rail train operations

(1) SRTD – Sacramento Regional Transit District

**REVISED APPENDIX A – Priority List by Ranking for Fiscal Years 2000-2001 & 2001-2002**

(Page **1 of 2**)

Rank	PUC ID	AGENCY	CROSSING LOCATION	Priority Index
1	3-22.4	LOS ANGELES CO	NOGALES ST	157.47
2	VY-69.33	LOS ANGELES CO	SIERRA HWY	153.23
3	2-885.6 2-885.6 2-885.75 2-885.77 2-885.95 2-886.2 2-886.4	BAKERSFIELD	BEALE-TRUXTON-BAKER (7 Xings) 21 <sup>st</sup> St Gage St Beale Ave Truxtun Ave Baker St Tulare St Sonora St	152.95
4	B-517.4	MONTCLAIR	MONTE VISTA AVE	133.46
5	DA-30.5 DA-30.9 DA-32.1 4G-2.6 SA-32.65 DA-32.7 DA-32.8 4G-3.2 DAB-42.4B DA-29.9B	FREMONT	CONSOLIDATION (10 Xings) Walnut Ave Stevenson Blvd Paseo Padre Pkwy Paseo Padre Pkwy High St Main St Washington Blvd Washington Blvd Mowry Ave Mowry Ave	126.49
6	B-485.8	LOS ANGELES	VALLEY BLVD	123.38
7	3-23.4	LOS ANGELES CO	FAIRWAY DR	107.43
8	3-53.1	RIVERSIDE	JURUPA AVE	100.85
9	OR-182.9	IRVINE	SAND CANYON AVE	93.71
10	2-1112.2 2-1113.5 2-1114.7 2-1108.3	SAN JOAQUIN CO	CONSOLIDATION (4 Xings) Jack Tone Rd Kaiser Rd Mariposa Rd Wagner Rd	86.91
11	2-1114.7 2-1113.5	BNSF Alternate for San Joaquin	CONSOLIDATION (2 Xings) Mariposa Rd Kaiser Rd	72.48
12	B-413.7	PALMDALE	PALMDALE BLVD (SR138)	71.94
13	BBJ-497.28 2-153.1	LOS ANGELES CO	(2 Xings) Norwalk Blvd Norwalk Blvd	69.54
14	B-311.8	BAKERSFIELD	Q ST	68.29
15	B-613.0	COACHELLA	DILLON RD	68.08
16	4-84.8	LATHROP	LATHROP RD	64.34
17	3-17.2	LOS ANGELES CO	TURNBULL CANYON RD	63.45
18	E-64.0 E-65.2 E-64.7	SAN JOSE	CONSOLIDATION (3 Xings) Bailey Ave Richmond Ave Laguna Ave	63.02
19	B-280.2	DELANO	CECIL AVE	61.93
20	D-92.8	SAN JOAQUIN CO	WEST LANE	58.73

**REVISED APPENDIX A – Priority List by Ranking for Fiscal Years 2000-2001 & 2001-2002**

(Page 2 of 2)

Rank	PUC ID	AGENCY	CROSSING LOCATION	Priority Index
21	DA-32.1 4G-2.6 SA-32.65 DA-32.7 DA-32.8 4G-3.2	FREMONT Alternate	CONSOLIDATION (6 Xings) Paseo Padre Pkwy Paseo Padre Pkwy High St Main St Washington Blvd Washington Blvd	57.59
22	3A-3.4 2-147.1C	LOS ANGELES CO	(2 Xings) Bandini Blvd Bandini Blvd	56.18
23	101VY-1.17	LOS ANGELES	NORTH MAIN ST	56.09
24	E-417.93	CAMARILLO	ADOLFO RD	55.49
25	B-308.9	KERN COUNTY	OLIVE DR	55.13
26	BB-0.4B	WEST SACRAMENTO	WEST CAPITAL AVE Emergency Repair	54.37
27	D-82.1	LATHROP	LATHROP RD	54.29
28	2B-21.20	CORONA	MCKINLEY ST	53.61
29	101EB-484A 101VY-1.36A	LOS ANGELES	(2 Xings) North Spring St North Spring St	53.47
30	E-419.92	CAMARILLO	LAS POSAS/UPLAND	52.16
31	BK-495.4	DOWNEY	BROOKSHIRE AVE	51.84
32	4-132.9	SRTD	FLORIN RD	50.98
33	DA-36.2 4G-6.7	FREMONT	(2 Xings) WARREN AVE	49.85
34	B-393.9	KERN COUNTY	ROSAMOND BLVD	49.40
35	C-258.0	REDDING	SOUTH ST	47.36
36	2-889.5	SHAFTER	7TH STANDARD	47.17
37	PROPOSED	TORRANCE	DEL AMO BLVD	42.60
38	BBH-487.42	LOS ANGELES CO	SLAUSON AVE	42.43
39	108AE-177.0	TEHAMA COUNTY	SOUTH AVE	40.97
40	36-7.4	CHULA VISTA	E ST	40.62
41	BB-0.4-B	WEST SACRAMENTO	WEST CAPITAL AVE Permanent	39.26
42	1C-238.3	TEHAMA COUNTY	BOWMAN RD	36.99
43	B-281.2	DELANO	GARCES HWY	33.34
44	VY-66.92	LOS ANGELES CO	AVENUE S	31.29
45	B-568.8	BANNING	HARGRAVE ST	30.62
46	2-1180.41-B	HERCULES	SYCAMORE AVE	27.43
47	3A-7.8	LOS ANGELES CO	FIRESTONE BLVD	27.32
48	BBH-492.6	LOS ANGELES CO	EL SEGUNDO	26.64
49	2-1180.40B	HERCULES	PALM AVE	24.12
50	PROPOSED	BAKERSFIELD	HAGEMAN RD	21.78
51	36-9.7	CHULA VISTA	PALOMAR ST	21.41
52	36-7.9	CHULA VISTA	H ST	20.40
53	PROPOSED	LOS ANGELES CO	FLORES ST	13.87
54	087-68-3	NAPA VALLEY WINE TRAIN	IMOLA AVE SR 121	13.23

I.99-07-001

**REVISED APPENDIX B – Nominations in Alphabetical Order with Priority Index and Rank**

(Page 1 of 2)

AGENCY	CROSSING LOCATION	Vehicle Volume V	Train T	Light Rail LT	Blkng Delay BD	Accd Hist AH	Cost (000) C	SCF /SF	Priority Index	Rank
BAKERSFIELD	BEALE-TRUXTON-BAKER (7 Xings)	19870	39	0.0	5.24	12	17680	62.13	152.95	3
BAKERSFIELD	HAGEMAN RD	15126	6	0.0	1.50	0	2820	15.98	21.78	50
BAKERSFIELD	Q ST	9252	36	0.0	4.87	3	7145	24.20	68.29	14
BANNING	HARGRAVE ST	2710	36	0.0	6.90	0	6960	19.00	30.62	45
BNSF	Mariposa /Kaiser ALT (2 Xings)	6777	38	0.0	1.44	6	6439	36.72	72.48	11
CAMARILLO	ADOLFO RD	18019	34	0.0	1.96	1	7390	26.00	55.49	24
CAMARILLO	LAS POSAS/UPLAND	18046	34	0.0	1.96	0	6522	30.00	52.16	30
CHULA VISTA	E ST	28643	2	20.6	0.53	4	15381	17.70	40.62	40
CHULA VISTA	H ST	23546	2	20.6	0.53	0	17381	18.45	20.40	52
CHULA VISTA	PALOMAR ST	41480	3	20.6	0.55	0	17381	17.69	21.41	51
COACHELLA	DILLON RD	14269	36	0.0	2.30	2	6375	26.44	68.08	15
CORONA	MCKINLEY ST	33720	51	0.0	1.60	0	17250	34.44	53.61	28
DELANO	CECIL AVE	18000	18	0.0	3.43	4	7848	25.06	61.93	19
DELANO	GARCES HWY	9957	18	0.0	3.43	1	7095	19.89	33.34	43
DOWNEY	BROOKSHIRE AVE	18766	11	0.0	10.00	0	8315	22.00	51.84	31
FREMONT	Walnut Ave & Others (10 Xings)	84598	11	0.0	8.82	0	28230	90.30	126.49	5
FREMONT	Paseo Padre Pkwy + ALT (6 Xings)	49976	11	0.0	8.82	0	39935	43.00	57.59	21
FREMONT	WARREN AVE (2 Xings)	11725	49	0.0	2.31	2	10688	22.00	49.85	33
HERCULES	PALM AVE	5000	35	0.0	0.00	0	6740	21.00	24.12	49
HERCULES	SYCAMORE AVE	8218	35			0	7800	23.00	27.43	46
IRVINE	SAN CANYON AVE	22000	62	0.0	0.89	4	15810	43.00	93.71	9
KERN CO.	OLIVE DR	17200	44	0.0	2.07	0	7070	28.50	55.13	25
KERN CO.	ROSAMOND BLVD	13400	18	0.0	2.90	2	6720	28.26	49.40	34
LATHROP	LATHROP RD	10497	20	0.0	3.87	4	6150	22.00	54.29	27
LATHROP	LATHROP RD	10497	26	0.0	3.06	5	6720	25.00	64.34	16
LOS ANGELES	NORTH MAIN ST	14188	117	0.0	2.76	1	55040	42.46	56.09	23
LOS ANGELES	NORTH SPRING ST (2 Xings)	19676	117	0.0	0.00	0	10146	26.20	53.47	29
LOS ANGELES	VALLEY BLVD	29203	68	0.0	3.09	9	30700	29.39	123.38	6
LOS ANGELES CO.	AVENUE S	21032	22	0.0	1.31	3	28243	22.80	31.29	44
LOS ANGELES CO.	BANDINI BLVD (2 Xings)	28453	39	0.0	1.91	2	29338	38.40	56.18	22
LOS ANGELES CO.	EL SEGUNDO	15332	2	23.6	0.84	0	24185	25.00	26.64	48
LOS ANGELES CO.	FAIRWAY DR	33205	51	0.0	2.00	3	13056	29.48	107.43	7
LOS ANGELES CO.	FIRESTONE BLVD	66310	14	0.0	1.60	0	25074	20.20	27.32	47
LOS ANGELES CO.	FLORES ST	10850	13	0.0	1.56	0	9630	11.12	13.87	53
LOS ANGELES CO.	NOGALES ST	43290	51	0.0	1.90	5	14514	31.32	157.47	1
LOS ANGELES CO.	NORWALK BLVD (2 Xings)	23247	110	0.0	2.35	0	23495	38.80	69.54	13
LOS ANGELES CO.	SIERRA HWY	12867	60	0.0	1.37	11	9216	28.68	153.23	2
LOS ANGELES CO.	SLAUSON AVE	35021	20	0.0	2.70	0	17992	29.80	42.43	38

I.99-07-001

**REVISED APPENDIX B – Nominations in Alphabetical Order with Priority Index and Rank**

(Page 2 of 2)

AGENCY	CROSSING LOCATION	Vehicle Volume  V	Train  T	Light Rail LT	Blkng Delay BD	Accd Hist AH	Cost (000) C	SCF /SF	Priority Index	Rank
LOS ANGELES CO.	TURNBULL CANYON RD	22136	51	0.0	2.14	2	16974	30.36	63.45	17
MONTCLAIR	MONTE VISTA AVE	12514	77	0.0	3.52	4	8500	31.00	133.46	4
NAPA VALLEY WINE TRAIN	IMOLA AVE SR 121	28200	1	0.0	1.67	0	2000	10.40	13.23	54
PALMDALE	PALMDALE AVE	33260	60	0.0	1.45	1	15030	32.84	71.94	12
REDDING	SOUTH ST	12405	39	0.0	3.13	0	7010	21.40	47.36	35
RIVERSIDE	JURUPA AVE	16190	55	0.0	1.95	5	13300	44.92	100.85	8
SAN JOAQUIN CO.	WEST LANE	22873	13	0.0	3.13	5	9100	26.80	58.73	20
SAN JOAQUIN CO.	Mariposa & Others (4 Xings)	10511	38	0.0	1.33	7.5	10444	46.32	86.91	10
SAN JOSE	Bailey Ave & Others (3 Xings)	6298	20	0.0	1.00	9	6950	41.24	63.02	18
SHAFTER	7 <sup>TH</sup> STANDARD RD	5300	62	0.0	2.09	1	7454	30.80	47.17	36
SRTD (1)	FLORIN RD	37022	16	0.0	0.93	3	10000	23.00	50.98	32
TEHAMA COUNTY	BOWMAN RD	5116	27	0.0	1.30	0	2484	28.30	36.99	42
TEHAMA COUNTY	SOUTH AVE	4970	23	0.0	2.60	0	2558	27.00	40.97	39
TORRANCE	DEL AMO BLVD	29000	29	0.0	5.00	0	18722	15.60	42.60	37
WEST SACRAMENTO	WEST CAPITAL AVE Permanent	7848	6	0.0	0.00	0	5320	38.20	39.26	41
WEST SACRAMENTO	WEST CAPITAL AVE Emergency Repair	7848	6	0.0	0.00	0	350	38.20	54.37	26

(1) SRTD – Sacramento Regional Transit District

**REVISED APPENDIX C – Nominations in Alphabetical Order with SCF/SF**  
(Page 1 of 3)

Agency	Crossing Location	CG	SB	PB	H	0	PT	AR	VS	RS	SA	CI	TOTAL SCF
BAKERSFIELD	BEALE-TRUXTON-BAKER (7 Xings)	46.40	2	1	1	1	0	3.73	3	0	1.00	3	62.13
BAKERSFIELD	HAGEMAN RD	2.48	1	1	1	1	0	3.50	5	0	0.00	1	15.98
BAKERSFIELD	Q ST	12.60	1	1	0	1	0	1.60	1	3	0.00	3	24.20
BANNING	HARGRAVE ST	6.00	1	0	0	0	1	5.00	1	3	1.00	1	19.00
BNSF	Mariposa Rd & Kaiser (2 Xings)	10.72	1	1	0	3	3	5.00	5	5	1.00	2	36.72
CAMARILLO	ADOLFO RD	5.00	1	1	0	0	3	5.00	2	4	3.00	2	26.00
CAMARILLO	LAS POSAS/UPLAND RD	7.00	1	1	0	1	3	5.00	3	4	3.00	2	30.00
CHULA VISTA	E ST	7.00	1	0	1	1	0	0.70	1	3	1.00	2	17.70
CHULA VISTA	H ST	9.00	1	1	1	1	0	0.45	1	1	1.00	2	18.45
CHULA VISTA	PALOMAR ST	6.60	3	1	1	1	0	0.09	1	1	1.00	2	17.69
COACHELLA	DILLON RD	9.44	1	0	0	0	1	5.00	2	5	2.00	1	26.44
CORONA	MCKINLEY ST	8.44	1	1	3	1	4	5.00	1	4	3.00	3	34.44
DELANO	CECIL AVE	5.44	2	1	1	3	0	2.62	1	4	2.00	3	25.06
DELANO	GARCES HWY	4.43	2	1	1	2	0	2.47	0	4	0.00	3	19.89
DOWNEY	BROOKSHIRE AVE	7.00	1	2	0	2	0	5.00	1	0	1.00	3	22.00
FREMONT	Walnut Ave & Others (10 Xings) + Mowry	48.00	1	2	1	1	0	3.20	1	1	3.00	3	90.30
FREMONT	Paseo Padre Pkwy + ALT (4 Xings)	32.80	0	0	0	0	0	3.20	1	1	2.00	3	43.00
FREMONT	WARREN AVE (2 Xings)	9.00	1	1	1	0	0	5.00	1	1	1.00	2	22.00
* HERCULES	PALM AVE					6	0	3	0	4	6	2	21.00
* HERCULES	SYCAMORE AVE					10	0	0	0	4	4	5	23.00
IRVINE	SAN CANYON AVE	8.00	3	2	0	3	8	5.00	4	7	1.00	2	43.00
KERN CO	OLIVE DR	8.60	2	1	1	1	0	4.90	3	4	2.00	1	28.50
KERN CO	ROSAMOND BLVD	8.26	3	1	1	0	0	5.00	3	4	1.00	2	28.26
LATHROP	LATHROP RD	6.00	3	1	0	0	0	5.00	1	4	0.00	2	22.00
LATHROP	LATHROP RD	6.00	3	1	0	0	3	5.00	1	4	0.00	2	25.00
LOS ANGELES	NORTH MAIN ST	22.16	2	2	0	1	10	1.30	1	0	1.00	2	42.46
* LOS ANGELES	NORTH SPRING ST (2 Xings)					10	0	5	0.2	4	4	3	26.20
LOS ANGELES	VALLEY BLVD	11.16	3	3	1	0	1	4.23	2	1	1.00	2	29.39
LOS ANGELES CO	AVENUE S	2.80	0	1	1	0	4	5.00	5	3	0.00	1	22.80
LOS ANGELES CO	BANDINI BLVD (2 Xings)	17.00	2	3	3	1	0	4.40	2	5	0.00	1	38.40
LOS ANGELES CO	EL SEGUNDO	12.60	3	2	1	1	0	1.40	1	2	0.00	1	25.00
LOS ANGELES CO	FAIRWAY DR	8.48	1	1	1	1	4	5.00	2	5	0.00	1	29.48
LOS ANGELES CO	FIRESTONE BLVD	9.00	1	3	2	1	0	2.20	1	0	0.00	1	20.20
LOS ANGELES CO	FLORES ST	3.12	0	0	0	0	0	5.00	1	0	0.00	2	11.12
LOS ANGELES CO	NOGALES ST	8.32	3	1	2	1	4	5.00	1	5	0.00	1	31.32
LOS ANGELES CO	NORWALK BLVD (2 Xings)	15.40	1	1	2	1	7	3.40	3	3	0.00	2	38.80
LOS ANGELES CO	SIERRA HWY	6.68	0	1	1	0	4	5.00	5	4	0.00	2	28.68
* KEY FOR EXISTING SEPARATIONS						WC	HC	SR	AS	POF	AP	DE	SF

**REVISED APPENDIX C – Nominations in Alphabetical Order with SCF/SF**  
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Agency	Crossing Location	CG	SB	PB	H	0	PT	AR	VS	RS	SA	CI	TOTAL SCF
LOS ANGELES CO	SLAUSON AVE	15.80	2	3	1	1	0	5.00	1	0	0.00	1	29.80
LOS ANGELES CO	TURNBULL CANYON	9.56	1	1	1	1	4	4.80	1	5	1.00	1	30.36
MONTCLAIR	MONTE VISTA AVE	9.00	2	1	0	0	3	5.00	2	4	2.00	3	31.00
NAPA VALLEY WINE TRAIN	IMOLA AVE SR 121	2.40	0	0	0	0	0	5.00	2	0	0.00	1	10.40
PALMDALE	PALMDALE AVE	6.24	3	1	0	3	4	2.60	2	6	3.00	2	32.84
REDDING	SOUTH ST	10.40	1	1	0	0	1	3.00	0	2	0.00	3	21.40
RIVERSIDE	JURUPA AVE	21.92	2	1	0	1	4	5.00	3	4	1.00	2	44.92
SAN JOAQUIN CO	WEST LANE	6.80	2	1	1	2	0	5.00	1	2	3.00	3	26.80
SAN JOAQUIN CO	Mariposa Rd & Others (4 Xings)	20.32	1	1	0	3	3	5.00	5	3	2.00	3	46.32
SAN JOSE	Bailey Ave & Others (3 Xings)	21.24	1	0	0	0	3	5.00	2	6	1.00	2	41.24
SHAFTER	7TH STANDARD RD	6.80	1	1	1	1	3	5.00	5	5	1.00	1	30.80
SRTD (1)	FLORIN RD	8.00	2	2	0	0	0	5.00	2	2	0.00	2	23.00
TEHAMA COUNTY	BOWMAN RD	9.80	1	0	0	0	1	5.00	5	5	1.00	0.5	28.30
TEHAMA COUNTY	SOUTH AVE	6.00	1	1	0	0	1	5.00	5	5	1.00	2	27.00
TORRANCE	DEL AMO BLVD	4.60	1	1	1	2	0	4.00	1	0	0.00	1	15.60
* W. Sacramento	WEST CAPITAL AVE Permanent					6	8	3	0.2	9	6	6	38.20
* W. Sacramento	WEST CAPITAL AVE Emergency Repair					6	8	3	0.2	9	6	6	38.20
* KEY FOR EXISTING SEPARATIONS						WC	HC	SR	AS	POF	AP	DE	SF

(1) SRTD – Sacramento Regional Transit District

**REVISED APPENDIX C – *Nominations in Alphabetical Order with SCF/SF***  
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***For Special Conditions Factor - SCF***

CG – Crossing Geometrics	H- Hazmat Trains/Trucks	AR-Alternate Route
SB – School Buses	O-Other Vehicles	VS –Vehicular Speed Limit
PB- Passenger Buses	PT – Passenger trains	RS – Rail Speed Limit
SA – Secondary Accidents	CI –Community Impact	

***For Separation Factor – SF***

WC – Width Clearance	HC-Height Clearance	SR – Speed Reduction
AS – Accidents Near Structure		POF – Probability of Failure
AP – Accident Potential	DE – Delay Effects	

**(END OF APPENDIX C)**